

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION	
Project Title: Black Mesa Catchment Redevelopment	Project No. 09-602
Region/GMU: Region 6/ GMU 23 South	HPC: Payson Natural Resource Committee
Project Type: Redevelop Water Catchment	
Project Description: This project is part of a 5-year habitat plan for Game Management Unit (GMU) 23 South relating to forage and water conditions. This project will redevelop an existing Forest Service water catchment on top of Black Mesa in southern unit 23. The majority of the unit's bighorn sheep population exists primarily on Black Mesa. This project will ensure water availability for bighorn as well as other wildlife on and near Black Mesa decreasing the need for wildlife to drop off the mesa and water in the Salt River which is almost 2 miles away. Both NEPA and archeological clearance have been completed.	
Wildlife Species to Benefit: Bighorn Sheep 50%, Mule Deer 25%, Whitetail Deer 25%	
Possible Funding Partners: ADBSS	
Implementation Schedule: Beginning: January 2010 Completed: July 2010	NEPA Compliance: (if applicable) Completed: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Projected Completion Date: 05/15/09
PROJECT FUNDING	
SBG Funds Requested: \$ 35,393.32 Cost Share Funds: \$ 4,500 Total Project Costs: \$ 39,893.32	
PARTICIPANT INFORMATION	
Applicant: Jarrod McFarlin, Wildlife Manager Telephone: 928-479-2150	Address: 7200 E. University Mesa, AZ 85207
AGFD Contact and Phone No. (If applicant is not AGFD personnel)	
Coordinated with: Shannon Torrence, Tonto Basin Ranger District, Joe Currie, AZ Game & Fish Development Branch	Date: 2009
Applicant's signature:	Date:

SEND COMPLETED APPLICATIONS TO:

Game Branch
 2221 W. Greenway Rd.
 Phoenix, AZ 85023
 mdisney@azgfd.gov

WAS PROJECT PRESENTED TO THE LOCAL HPC? **YES** _____ **NO** **X**

HAS PROJECT BEEN SUBMITTED IN PREVIOUS YEARS? No IF SO WAS IT FUNDED?
N/A

NEED STATEMENT/PROBLEM ANALYSIS:

The need for reliable forage and water in GMU 23 South has become a concern for the wildlife managers in that unit. This project deals specifically with water needs in the Upland Sonoran Desert Scrub area of GMU 23 South but is part of the overall long-term habitat needs that will improve wildlife habitat and sustain a viable to growing population.

A current Forest Service water catchment exists on Black Mesa that has long since been in need of repairs to make it fully operational and maintenance free. The redevelopment of this catchment will allow the bighorn sheep and other wildlife on Black Mesa multiple sources of water. Currently, any wildlife in the vicinity of Black Mesa needs to drop off the mesa and seek water at the Salt River which is nearly 2 miles away. This should also help in preventing some predation on bighorn sheep and other wildlife by providing multiple sources of water within the area as well as fewer ambush sites for predators as the wildlife travel to and from the river.

PROJECT OBJECTIVES:

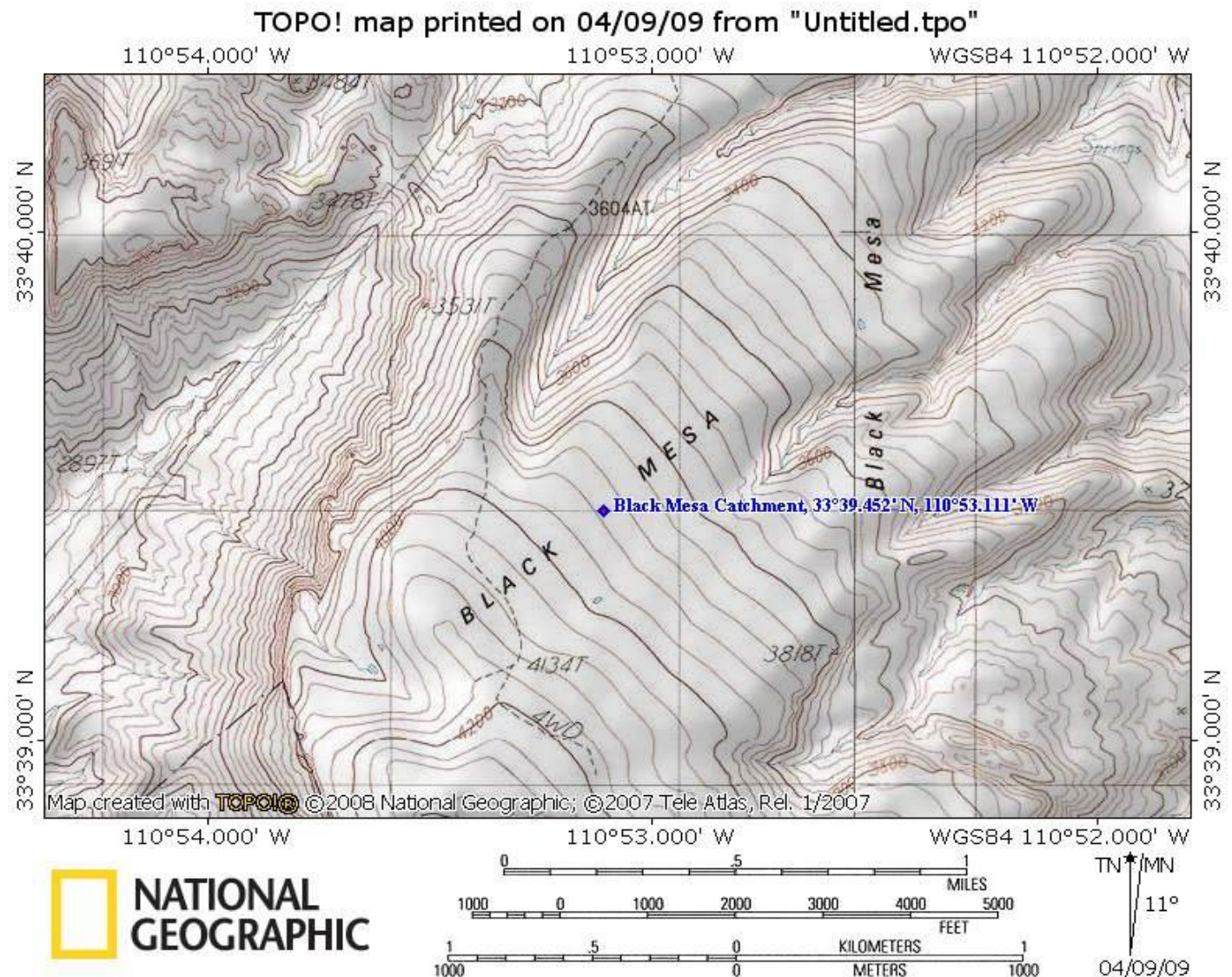
This project will provide a reliable water source to bighorn sheep and other wildlife in the Black Mesa area of GMU 23 South. As part of the landscape analysis for defining reliable water, I used a list of criteria. The criteria for reliable waters are those waters that are perennial, not ephemeral or seasonal, not stock tanks or windmills or ephemeral springs. A spring that has water in the winter months but not the summer months, for example is ephemeral and not reliable to wildlife during the critical summer fawning months. Another example of an ephemeral water is a stock tank that goes dry during certain times of the year, or a windmill that only operates when cattle are in that particular pasture. There are currently 2 stock tanks on Black Mesa that hold little to no water during the wet season.

PROJECT STRATEGIES:

This redevelopment will improve water availability for bighorn sheep, mule deer and white tail deer. The project should also decrease predation by preventing the bighorn sheep and other wildlife from having to travel down the face of the mesa nearly 2 miles to the river which is the only available water in the area. This should help currently low numbers of bighorn sheep in the area and in time allow for more hunter opportunity in Unit 23.

PROJECT LOCATION:

This project is located in the Tonto Basin Ranger District near Roosevelt Lake, just south of Cherry Creek Road. Township4N, Range14E, Section 23. See attached map.



LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name): United States Forest Service, Tonto Basin Ranger District.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT? N/A

HABITAT DESCRIPTION:

Arizonan Upland Sonoran Desert Scrub with some dispersed juniper. The elevation is about 2500 feet.

ITEMIZED USE OF FUNDS: Black Mesa Catchment

COOPERATOR AND PROJECT COMPONENT	COST-SHARE DOLLARS AVAILABLE	SBG FUNDS REQUESTED
Arizona Game & Fish Department (SBG Funds) ■ Funding for implementation of on-the-ground work		\$35,393.32
Arizona Game & Fish Department ■ In kind labor to write proposal, coordinate project, completion report. Calculated as 10 days @ \$150/day.	\$1,500	
USDA – Tonto Nat'l Forest, Tonto Basin Ranger District ■ Provided administrative support including labor/funding to produce NEPA and Archeological clearances. ■ Wildlife Redevelopment money.	\$2,000 \$1,000	

TOTALS:	\$4,500	\$35,393.32
RATIO OF COST SHARE:SBG FUNDS .13:1		
TOTAL PROJECT COST = \$39,893.32		

Anticipated Costs are:

- 1 - 24' X 48' Apron @ \$4, 600.00
- 1 – 18' X 3' Ring Tank @ \$9,925.00
- 1 – 3' Fiberglass Walk-in Trough @ \$3,268.32
- 150' X150' Piperail Fence @ \$2,850.00 (includes concrete for posts)
- Misc. Plumbing and Concrete @ \$750.00
- Helicopter time estimate --- approximate @ \$15,000.00

Materials Total: 36,393.32

TOTAL GRANT FUNDS REQUESTED: \$35,393.32

AGFD in-kind labor: \$1,500

USDA Forest Service, T.N.F –NEPA,
Archeological Clearances and Wildlife Money: \$3,000

Total Costs: \$39,893.32

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

Arizona Game & Fish Department: In-kind labor writing proposal, coordinate & engineer projects, completion report, site visits and maintenance after completion.

USDA T.N.F, Tonto Basin Ranger District: NEPA and Archeological Clearances. Wildlife redevelopment money.

Non-Profit Organization (possible funding partners): Arizona Desert Bighorn Sheep Society, Arizona Deer Association

PROJECT MONITORING PLAN:

No monitoring will be required other than regular water level checks and maintenance, to be conducted by the Department. Monitoring and maintenance are funded through the Federal Aid Wildlife Restoration monies administered by the Development Branch

PROJECT MAINTENANCE:

This tank should not require much maintenance other than checking the water level, checking for water leaks and cleaning out debris from the trough when necessary.

PROJECT COMPLETION REPORT TO BE FILED BY:

Project Author

WATER DEVELOPMENT PROJECTS (see attached worksheet):

ARIZONA GAME AND FISH DEPARTMENT **WATER DEVELOPMENT WORKSHEET**

PROJECT NAME: Black Mesa Catchment Redevelopment

- 1) Is the water development listed as a priority in the most recent "Wildlife Water Development Annual Implementation Schedule?" No
- 2) Please list the Development Branch personnel and date coordinated with for this project.
Joseph Currie
- 3) What is the estimated annual inches of precipitation for the area? (mark one)
☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8-10 ☐ 10-12 ☒ 12-14 ☐ 14-16 ☐ >16
- 4) Is there a perennial water source available to big game within four miles of this project?
☒ YES (please complete #5 below) ☐ NO (skip #5 below)
- 5) For the accessible, perennial water source nearest this project:
Name of water source: Salt River
Type of water source (catchment, spring, dirt tank, etc.): River
Ownership of water source: USFS, Tonto Basin Ranger District
Distance in miles from project: about 2
- 6) Is the target wildlife species a result of transplant efforts? ☐ YES ☒ NO
- 7) Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.
- 8) Please provide the following information about access to the proposed site:
Type of access (mark one): ☐ 2x4 vehicles ☒ 4x4 only ☐ foot only**
**If foot access only: Distance in miles: Approx. hiking time:
-- Does access to this site require crossing private or tribal lands? ☐ YES ☒ NO
-- Please describe any restrictions to public access:
- 9) Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.
1 - 24' X 48' Apron @ \$ 4, 600.00
1 - 18' X 3' Ring Tank @ \$ 9,925.00
1 - 5'6" Fiberglass Walk-in Trough @ \$ 4,324.32
1- 150' X150' Piperail Fence @ \$ 2,850.00 (includes concrete for posts)
Misc. Plumbing and Concrete @ \$750.00

Total Materials Cost:
- 10) Was a site visit completed? ☒ Yes ☐ No
If Yes, please list personnel that attended and date. Joe Currie, Jarrod McFarlin in April, 2009